Roads

INTRODUCTION

Access to the Boise, Payette and Sawtooth National Forests is provided by a complex and integrated transportation system of roads under Forest Service, county, state, and private jurisdiction. The entire system of roads amounts to approximately 10,700 miles of classified roads that range from double-lane paved highways to narrow, native-surface roads. An estimated 93 percent of these miles comprise Forest roads under the jurisdiction of the Forest Service. The remaining 7 percent, including approximately 500 miles of designated Forest Highways, are controlled by other public agencies or private concerns. This integrated road system connects the Forest road system to towns, communities, and major state and interstate highways.

Roads are important facilities on the Boise, Payette, and Sawtooth National Forests, providing access for recreation activities, timber removal, resource utilization, wildland fire protection, and for facilities operated under special use authorizations. However, roads also have the potential to adversely affect a number of resources in various ways. Forest road systems are dynamic in that roads may be constructed or re-constructed for needed access, some or they may be closed or decommissioned in an effort to reduce impacts to other resources. This section of Chapter 3 describes the potential effects of each alternative's management strategies on the road system rather than the effects of roads on other resources. Analysis of the effects of roads on other resources can be found in the corresponding resource sections in this chapter.

In forest plan revision, roads are addressed at the programmatic scale rather than a site-specific or individual road scale. As such, this process does not determine whether specific roads will be constructed, maintained, periodically closed, or decommissioned. Through their management direction, forest plans provide a basis for analyses and decisions that follow and are required to make those types of site-specific decisions.

Forest System trails are addressed in the *Recreation* section of this Chapter.

Issues and Indicators

Issue Statement – Forest Plan management strategies may affect the road transportation system and how these roads are maintained.

Background - Management of National Forest System roads is an issue of national concern. Public interest in the roads within National Forests is increasing, and few natural resource issues in recent years have attracted as much public scrutiny as road management. Critical issues linked to the roads within National Forests include public access, resource damage, habitat loss, maintenance capabilities, and economics. Yet some level of road development is needed to produce the goods and services that

Americans expect from their national forests. A long-term road strategy to address many of these issues was developed and reflected in the Forest Service Road Management Strategy adopted January 12, 2001. Sometimes referred to as the "Roads Rule", this policy established the scope and scale of roads analyses needed to inform road management decisions regarding new construction, reconstruction and decommissioning. It also established parameters for construction and re-construction of roads within Inventoried Roadless Areas.

Comments received both externally and internally reflected two components: the number of miles of designated Forest roads that are developed, and how the roads are maintained. A large number of comments received during forest plan revision comment periods focused on the amount of roads that should be maintained as part of the system. Comments were divided between those expressing the need to maintain current access and roads for resource management and recreation needs and those supporting reducing the road system to reduce impacts of roads on other resources and the need to lower road densities. Many comments expressed concerned that overall access to the Forests was decreasing. One comment suggested the adoption of a "no net loss of roads" policy. Other comments expressed concern about concentrating public use on fewer and fewer acres, thus causing increased resource damage. Still other comments questioned the merits of reducing the road system in the face of expanding recreation use and access needs. Opposing comments favored a policy of "no new roads", especially in areas that are currently unroaded. These comments led to a significant issue related to the level of the managed road system that should be developed on the three Forests. Reducing the level of access, through decommissioning roads, would potentially:

- Concentrate use, increasing resource impacts in those areas;
- Reduce the safety of recreation experiences;
- Reduce economic development opportunities; and
- Reduce resource management capabilities.

Conversely, continued expansion of the road system would potentially:

- Increase potential impacts to fish habitat and Threatened, Endangered and Sensitive species;
- Increase fragmentation of habitat for terrestrial wildlife species; and
- Reduce opportunities for primitive recreation experiences away from the influence of roads.

Road access on National Forests consists of two components: Classified roads, which are usually part of the National Forest Road system or roads under other jurisdiction; and unclassified roads, which are usually user-created roads that have never been designed, constructed, or maintained. Analyzing effects to classified roads under each alternative would only address one side of potential impacts to access on the three National Forests. Like classified roads, unclassified roads are also dynamic in that users create new ones, while others are decommissioned. To provide a more complete estimate of potential effects to road access under the alternatives, this analysis will address potential effects on both classified roads and unclassified roads.

Some comments also expressed concern about road maintenance funding, specifically that expected road maintenance budgets may not provide for the adequate and timely maintenance of all Forest classified roads to their appropriate standard. The inability to provide an appropriate level of road maintenance could require the Forests to close roads until user safety and resource protection can be assured.

Indicators - The following indicators are used to measure the effects of management strategies on Forest roads on the three Forests by alternative.

- Indicator 1 - *Projected total miles of Forest Classified Roads in 2015*. This indicator is used to assess how Forest access levels may vary by alternative through the next planning period.

- Indicator 2 - *Estimated miles of unclassified roads decommissioned by 2015*. This indicator is used to assess relative levels of decommissioning of unclassified roads through the next planning period under each alternative.

- Indicator 3 - *Percentage of anticipated 2015 Forest Classified Roads maintained to standard based on experienced budget averages*. This indicator is used to compare the alternatives relative to anticipated road maintenance capabilities.

Affected Area

The affected area, for direct and indirect effects to roads, is the Forest Classified Road System within the three National Forests of the Ecogroup. This transportation network represents the roads that could receive impacts from both management activities and natural events. The affected area for cumulative effects includes these roads plus additional Forest Highways that lie within Ecogroup area boundaries, but that are under the jurisdiction of other agencies or governments. Cumulative effects to roads that are under other jurisdiction are addressed to lend a broader perspective to the importance of roads on the Forests and to emphasize cooperation among all local transportation resource providers.

CURRENT CONDITIONS

Forest road systems are dynamic. Forest engineering and resource personnel work together in an on-going process of transportation system planning and management. Roads are constructed and reconstructed based on established standards for their intended use and anticipated long-term management needs. Most new road construction is done in support of timber management, although small amounts of road are occasionally constructed for recreation or mining access. Road reconstruction is done for a number of purposes, which include improving road conditions for driver safety and mitigating resource impacts. Road decommissioning occurs when a road is no longer needed for resource management. Road decommissioning terminates motor vehicle use of roads no longer needed and restores ecological processes interrupted or impacted by the unneeded roads. Roads are

also candidates for decommissioning when maintenance requirements and resource impacts outweigh access needs. Decommissioning includes various levels of treatments to stabilize and rehabilitate unneeded roads such as blocking the entrance, revegetating and water barring, removing fills and culverts, re-establishing drainage-ways, and removing unstable road shoulders, or full obliteration by recontouring and restoring natural slopes. A site-specific analysis is required for all road construction, reconstruction, or decommissioning on the Forests.

Currently, new road construction ranges from 0 to 10 miles per year, reconstruction ranges from 0 to 40 miles, while decommissioning ranges from 0 to 40 miles on the Ecogroup Forests. The activity level varies depending on the number and type of projects that are approved for implementation each year. Implementation is dependent on the level of public controversy with proposed projects, agency priorities, and allocated funding levels.

Managing and maintaining the existing National Forest System roads has not kept pace with the rise in visitors to our national forests and grasslands or the increased scientific understanding of the ecological effects of roads. In 1999, the Forest Service initiated a process to develop a new road management policy for all National Forest System lands managed by the agency. In January 2001, the Forest Service adopted a new road management policy, which directs the agency to maintain a safe, environmentally sound road network that is responsive to public needs and affordable to manage. The new roads policy updates the previous roads policy written in the early 1970s. The purpose of the new policy is to provide guidelines for how the agency will manage existing roads. It includes an analysis process to be used before building new roads and a process for determining when roads are to be decommissioned. The policy relies on Forests conducting a science-based analysis of their long-term access needs and integrating the results of that analysis into the forest planning process. Currently, the Forest Service is looking at ways to make the road management policy work better and is conducting an internal review of the policy. Transportation system management on the three Ecogroup Forests will be consistent with the direction provided by the new policy.

Existing Road System

Most of the administrative, commercial, and public travel on the three Forests occurs on the National Forest System road network of classified roads. Access to the Forests is provided largely by a combination of classified roads under Forest Service jurisdiction, along with roads under county and state jurisdiction. In some locations, access is provided through cost-share roads. These are Forest roads that are constructed and maintained in partnership with other agencies or private landowners when access is of mutual benefit to two or more parties. User-created roads also exist in numerous locations

Through transportation analysis, public access opportunities are analyzed and may be provided along with controls and restrictions necessary to achieve land management objectives. Many of the classified roads within the Ecogroup area have been determined to be needed for public access or resource management needs and are open and available for public use.

Forest roads provide access in a branching system of arterial, collector, and local roads. Arterials provide access to large land areas, typically by linking to county roads, state highways, or communities. They have the highest standards for construction and maintenance because of the larger volume of traffic they carry. Collector roads disperse traffic from arterials to large Forest areas such as watersheds. Local roads, used to access specific project areas or sites may be of a lower standard of construction. Table RO-1 displays the total miles of Forest roads under Forest Service jurisdiction on the three Forests by functional class.

In some areas, "roads" develop not through planning, design, and construction, but through repeated passage of vehicles traveling off of transportation system roads. These unplanned travelways are commonly called a number of names, including "ghost roads" and "two-tracks", and are not considered to be part of the road system, nor are they included in the roads in Table RO-1. In this analysis, these roads are referred to as unclassified roads.

Table RO-1. Approximate Miles of Existing National Forest System Roads Within Forest Service Jurisdiction*

National Forest	Functional Class		Total
	Arterial / Collector	Local	
Boise	921	4,026	4,947
Payette	706	2,437	3,139
Sawtooth	413	1,506	1,919

*Source of classified road mileage estimates are FY 2002 Road Accomplishment Reports.

Road Maintenance

Maintenance of Ecogroup Forest system roads is complicated because it is accomplished through cooperation with other agencies and private concerns. In some cases, maintenance responsibilities are exchanged with other jurisdictions through maintenance agreements when such actions create efficiencies for both parties. Roads maintained by other agencies, local governments, or private organizations under road maintenance agreements are maintained according to the terms of the maintenance agreement, which may not necessarily be to established agency-set standards. In cost-share road cases, maintenance is accomplished commensurate with commercial uses of the road. In that jurisdiction of Forest roads sometimes shifts to county or state agencies, road maintenance responsibilities are not static. The total miles of road maintenance responsibility for 2002 are displayed in Table RO-2.

Table RO-2. Miles of Road Maintenance Responsibility in 2002

National Forest	Miles
Boise	4,947
Payette	3,143
Sawtooth	1,919

The Forests' ability to maintain their road systems is dependent on a number of factors, including:

- Total miles of open roads,
- Allocated funding for road maintenance,
- Miles maintained through commercial activities, such as timber sale contracts,
- Allocated funding for road improvement projects to support other resources,
- Maintenance levels,
- Resource protection levels, and
- Recreation traffic levels.

Road maintenance budgets have fluctuated during the past 10 years. However, traffic volumes on the Forest road system have steadily increased. Because of fewer timber sales, commercial user contributions to road maintenance also have declined. This affects not only recurrent maintenance, such as seasonal blading, but also deferred maintenance such as long-term surface replacement. Local population growth has increased the burden on county-maintained road systems, while budgetary constraints have concentrated maintenance priorities on roads closer to urban areas. Consequently, not all roads have been maintained to the level prescribed in management objectives.

Funding has been well below that needed for to maintain the entire road system at operational maintenance level standards. As a result, roads are maintained on a priority basis. User safety, resource protection, and user comfort needs are used to prioritize roads for maintenance. The average miles of road maintained to standard per year are displayed in Table RO-3. Annual accomplishment reporting indicates that the Forests have achieved full maintenance standards on an estimated 19 to 22 percent of the transportation system across the Ecogroup area based on accomplishment reports for the three Forests for the period of 2000 to 2002.

Roads meeting identified long-term needs but not short-term needs are often placed in a Level 1 maintenance category. This level usually involves physical closure of the road for a period of one year or longer but not decommissioning, and these roads are not open for vehicle travel until needed again.

Table RO-3. Average Annual Road Maintenance[1]

National Forest	Miles of Road Maintained	Percent of Roads Maintained	Miles of Road Maintained to Standard	Percent of Roads Maintained to Standard
Boise	2,079	42%	1,072	21%
Payette	730	22%	636	19%
Sawtooth	531	29%	416	22%

[1] Based on a 3-year average from 2000 to 2002.

ENVIRONMENTAL CONSEQUENCES

Effects Common to All Alternatives

Resource Protection Methods

Laws, Regulations, and Policies – Numerous laws, regulations, and policies govern the management of recreation resources on National Forest System lands. These are listed in *Appendix H* to the Forest Plans.

Forest Plan Direction – Forest Plan guidelines require an analysis of long-term needs prior to decommissioning National Forest System roads during project level planning. This type of analysis would also be conducted prior to any major road construction or reconstruction.

General Effects

Road construction and reconstruction are usually associated with development related to timber harvest, utility lines, mineral and energy exploration and production, recreation facilities, and public safety. Most of the Forests' road needs for the current level of use are in place. Reconstruction, maintenance, and decommissioning of existing facilities are included within each alternative. Projections for new construction are much lower than was predicted for the previous planning period. Commercial use of the transportation system has declined in the 1990s and this trend is expected to continue, to some extent, in the coming decade. On the other hand, recreational traffic has increased substantially. This shift in traffic composition and user types is a driving force for development of new travel management philosophies and strategies.

New standards and guidelines have been developed to mitigate the impacts on natural resources resulting from the current road system and its increased use. Nationally, the trend in the 1990s has been to redirect maintenance funding to decommission unneeded roads and improve the maintenance conditions of those remaining. A smaller, more efficient transportation system is the expected outcome.

Road Improvements - Currently, there are ten roads within the Ecogroup area that are being considered for improvement under all alternatives. About half of these improvement projects would improve the standard above their current standard for only along 2 or 3-mile segments of these roads.

The other half of these projects range from 6 to 14 miles of improvement. These improvement projects are still in very preliminary stages of development and still need to be analyzed on a site-specific basis prior to project approval and implementation. Each road improvement project may change substantially or be dropped from further consideration as further information is gathered and considered. Accomplishment of these road improvements is very dependent on capital improvement funding within the agency. Priorities can also shift dramatically, for varied reasons, which may cause some projects to rise in priority or drop completely off the capital improvement list.

Recreation – Increasingly, national forest and other public lands are likely to be the destinations of choice for people looking for high-quality outdoor recreation experiences in natural settings. As populations grow and urban development expands, the use of Forest roads increases. The arterials and major collectors that connect the Forests to these areas will experience the most increased day-use traffic, particularly on weekends. This traffic will add to the maintenance work necessary to keep the roads in a safe and structurally sound condition. Continued growth in recreation use without increases in the road system will likely lead to lower visitor satisfaction and more conflicts between users. New road construction for recreation purposes is expected to be very low to none, and would not vary by alternative.

Restoration Activities – Restoration activities include a broad array of management activities including timber harvest, road construction, reconstruction and decommissioning, prescribed fire, facility relocation and modification, fish habitat improvement, streambank stabilization, slope stabilization, and mining reclamation. The effects that some of these activities may have on the transportation system are described in greater detail, below.

Timber Harvest – Historically, most Forest roads were constructed for timber management purposes. Today, timber management is still a significant contributor to the need for new road construction, although this need has declined due to a combination of reduced harvest and improved helicopter logging technology. The Forests' ability to decommission roads is also linked, to some extent, to timber sales in that funds gained through timber sales are frequently also used to decommission roads within the sale area. Road decommissioning is also funded by watershed restoration, minerals, and other sources. Timber management has historically also been a significant contributor to road maintenance activities on the three Forests. Timber sale purchasers are usually required to perform recurrent road maintenance during timber hauling operations or post cash deposits in lieu of performance in the case of some small sales. Deferred maintenance deposits are also collected from timber sale purchasers in most cases. These road maintenance contributions have been historically higher on the Boise and Payette National Forests than the Sawtooth due to their higher levels of past timber management development.

Mineral and Energy Exploration, Development, and Reclamation – Road development is often associated with mineral and energy exploration and development activities. Given recent levels of these activities, little or no road development is anticipated for all of the alternatives. A site-specific analysis would be needed prior to final approval of any road development for these purposes. Reclamation activities may include re-opening closed roads or re-construction of

existing ones for temporary or short-term access needs. In that the level of mineral exploration and development is largely driven by market forces and regulated by existing mining law, there would be little difference between the alternatives in effects on the roads. Reclamation activities may vary depending on differences in alternative restoration emphasis.

Utility Developments – These include pipelines and overhead powerlines that can potentially require road construction or reconstruction for the installation and/maintenance of developed facilities. In some cases, helicopters can be used effectively to reduce new road construction needs. Little or no road construction and reconstruction associated with utility development is anticipated for all alternatives.

Telecommunications Sites – Sites include communications developments that can potentially require road construction or reconstruction for the installation and/maintenance of developed facilities. In some cases, helicopters can be used effectively to reduce new road construction needs. Little or no road construction and reconstruction associated with telecommunication site development is anticipated for all alternatives. A site-specific analysis would be needed prior to final approval of any telecommunications site development.

Fish and Wildlife Habitat Protection and Watershed Improvement – These management activities can include both road management and road improvement activities done for watershed restoration. In some cases, road management measures reduce access where wildlife habitat or watershed improvement is emphasized. Some roads are closed or decommissioned upon conclusion of the primary purpose activities, while others are managed with seasonal closures in an effort to protect wildlife or their habitat. Usually, these considerations are made during project planning as part of determining transportation system needs for project implementation.

Road improvements done for fisheries and watershed restoration can include a variety of road-related activities such as culvert replacements and road re-alignments. Generally, these road improvements are designed to reduce impacts, such as sediment delivery from existing roads to fish and watershed values.

Direct and Indirect Effects by Alternative

Indicator 1 - Anticipated Changes to the Classified Road System

The projected total miles of the classified road system on each Forest by 2015 is shown in Table RO-4. These figures were developed using decadal averages for the first two decades from the Spectrum ASQ model and do not reflect any shifts to state or county jurisdiction. As such, they are not meant to be accurate in terms of specific road mileages, but rather are useful for comparing relative differences between alternatives. They are also not spatial and do not correspond with any specific geographic locations. These estimates reflect the total miles of classified road system that would be available to meet all resource objectives based on road construction and decommissioning assumptions used in the model. They reflect the anticipated

results of management direction associated with the MPC assignments of each alternative. They do not reflect seasonal closures for resource protection or maintenance level 1 closures. Thus, they are not necessarily the miles that would be open for public use. Access is determined though site-specific decisions that may limit or restrict access to protect resource values.

Table RO-4. Projected Miles of Classified Roads in 2015

National Forest	Current Miles	Estimated Road Miles by Alternative						
		Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	5,496	5,285	5,144	4,928	5,197	5,252	5,364	5,206
Payette	3,197	3,326	3,271	3,328	3,195	3,339	3,182	3,294
Sawtooth	2,019	2,024	2,013	2,008	2,018	2,030	2,019	2,016

The decommissioning focus varies by Forest. With its relatively high level of classified roads and classified road densities, the majority of the decommissioning work on the Boise has focused on classified roads. On the Payette and Sawtooth, most decommissioning effort has been directed towards unclassified roads, which frequently present greater levels of impact than classified roads that are constructed to much higher standards. The Payette and Sawtooth also have more complete inventories of their unclassified roads, facilitating their incorporation into project-level analyses.

Under every alternative, some level of road construction, reconstruction, and decommissioning would be likely to occur. New roads will continue to be built, as needed and approved, while others are decommissioned as approved. Levels of new road construction and decommissioning fluctuate on a yearly basis due to a number of factors, including fluctuations in funding and project-level implementation schedules. In most years of the recent past, decommissioning miles have usually exceeded new construction miles due largely to efforts to reduce road-related effects on aquatic resources. Usually, classified roads that are decommissioned are local roads rather than arterial or collector roads. This is due to a number of factors, including that arterial and collectors are relatively fewer in number, receive significantly higher traffic levels, and provide access to developed facilities or serve as vital transportation links between state and county roads.

Anticipated levels of both new road construction and decommissioning are the lowest in Alternatives 4 and 6 due to a low level of management activities. The resultant road systems under those alternatives would show relatively low levels of change in overall miles from the current system.

Because the level of anticipated decommissioning exceeds the level of anticipated new road construction on the Boise, the total miles of roads on the Forest would decrease under all alternatives. The resulting transportation network would contain fewer roads but would provide higher standards of maintenance and levels of service to accommodate the increasing traffic, while providing higher levels of protection to sensitive resources. With its high level of classified roads, most road decommissioning on the Boise has been focused on classified roads. With their emphasis on restoration management, Alternatives 3 and 2

would be likely to result in the greatest levels of reductions to the current system, with Alternative 3 having the greatest reduction. Alternatives 4 and 7 would both have moderate levels of road system reductions. Alternatives 1B and 5 would provide the second and third smallest reductions of roads on the Boise, respectively. Alternative 6 would result in the least amount of change from the current road system because of relatively low levels of both new construction and decommissioning.

The classified road system on the Payette both expands and contracts under the alternatives. It expands to varied levels under Alternatives 5, 1B, 7, 2, and 3, with Alternative 5 resulting in the largest road system increase and Alternative 3 providing the smallest. Given recent history and resource conditions, the levels of road system expansion on the Payette are probably exaggerated. However, the relative relationships between the Alternatives are probably still valid. The road system contracts slightly under Alternative 4 and to a larger extent under Alternative 6.

The scale of change is somewhat less for the Sawtooth than for the Boise and Payette due to its smaller road system and lower level of timber sale (i.e., new road construction) opportunities. Relatively little change to the classified road system would be expected for the Sawtooth under any alternative. The road system would be expected to expand slightly under Alternatives 5 and 1B, with 5 showing the greatest increase. Conversely, it would be reduced the most under Alternative 3. Smaller reductions would likely occur under Alternatives 2, 4, and 7. Levels of new construction and decommissioning are expected to be about the same under Alternative 6, keeping the projected road system about the same as its current level.

Indicator 2 - Anticipated Changes to the Unclassified Roads

The analysis presented above addresses changes to the classified road system. Unclassified roads are typically created by recreational users when they drive off of classified roads to access a fishing or camping site, retrieve game, test driving skills on hillsides, and for many other reasons. These travelways were never designed, constructed or maintained to any standard. Quite often, they are pioneered in sensitive areas such as riparian areas and, with repeated use, typically result in more resource damage than classified roads.

Unclassified roads are usually analyzed during watershed analysis or project-level analysis to determine their associated resource impacts, their historical significance, or if they are needed. If they are needed, they are usually incorporated into the classified road system and appropriate management and maintenance are assigned. If not needed, a decision to decommission and rehabilitate them is usually made. In recent years, much of the road decommissioning effort has focused on unclassified roads. Based on averages for the past three years for the Ecogroup Forests, an estimated 59 percent of the roads that have been decommissioned were unclassified roads. This percentage is higher on the Payette (79 percent) and Sawtooth (85 percent) than the Boise (15 percent). As such, the analysis for classified roads above under-represents the overall decommissioning levels and emphasis on the Payette and Sawtooth National Forests.

Each Forest of the Ecogroup is at a different level in their inventory of unclassified road, but none of the three Forests has a complete inventory of the unclassified roads that exist. As a result, the total miles of existing unclassified road on each Forest is not known, making an analysis similar to that done for classified roads difficult. However, the above percentages can be analyzed in combination with Spectrum decommissioning estimates for each alternative to estimate relative levels of unclassified road decommissioning under each alternative. These estimated levels are displayed in Table RO-5.

Table RO-5. Estimated Miles of Unclassified Roads Decommissioned by 2015

National Forest	Decommissioned Unclassified Road Miles by Alternative						
	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	62	104	122	60	74	29	74
Payette	194	224	370	117	220	83	200
Sawtooth	37	80	118	21	47	13	68

Rankings by Forest for the alternatives are the same with only a couple minor exceptions. For all three Forests, decommissioning of unclassified roads is likely to be the most aggressive under Alternative 3, which would likely result in the highest level of unclassified road decommissioning. Alternative 2 would follow Alternative 3. This is consistent with the emphasis on restoration activities and the levels of assignments of restoration prescriptions in Alternative 2. Alternatives 5, 7, and 1B present relatively moderate levels of decommissioning for the three Forests. Alternative 4 also presents moderate level on the Boise but is relatively lower on the Payette and Sawtooth. Alternative 6 offers the lowest levels of decommissioning for all three Forests. It is also likely that under any alternative, decommissioning unclassified roads is likely to continue in areas where strong resource concerns exist. Opportunities for travel and access on low-standard roads will likely decrease in such areas.

Anticipated effects to recreational access are more specifically analyzed and addressed in the *Recreation* section of this chapter.

Indicator 3 - Road Maintenance Capabilities

As noted above, road maintenance capabilities are affected by a number of variables. Because budget allocations vary from year to year and Forest to Forest, it is difficult to predict final budget allocations. Also, there is no direct linkage between stated Forest Plan budget needs and what Congress eventually allocates, so there is no assurance that final budget levels will even approach those stated in Forest Plans. Recent maintenance performance levels can be used in combination with anticipated road system levels to estimate the relative percent of the road system that could be maintained under each alternative. This does not account for road maintenance contributions from commercial users or road maintenance cooperators. However, commercial road maintenance contributions are currently relatively small. Based on each alternative's relative levels of mechanical vegetation treatments, Alternatives 3 and 5 would probably provide greater road maintenance contributions from commercial users. Alternatives 2,

7, and 1B would provide similar levels, while Alternatives 4 and 6 would provide the lowest levels. Road maintenance cooperator contributions would probably vary little by alternative and would also be relatively small. Table RO-6 represents the anticipated level of road maintenance to operational maintenance level standards that would be accomplished by the Forest Service alone, given road maintenance accomplishment levels comparable to those of 2000, 2001, and 2002.

Table RO-6. Percentage of Anticipated 2015 Road System Maintained to Standard Based on Road Maintenance Accomplishment Levels in 2000, 2001, and 2002

National Forest	% Roads Maintained to Standard by Alternative						
	Alt. 1B	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7
Boise	20.3%	20.8%	21.7%	20.6%	20.4%	20.0%	20.6%
Payette	19.1%	19.4%	19.6%	19.9%	19.0%	20.0%	19.3%
Sawtooth	20.6%	20.7%	20.7%	20.6%	20.5%	20.6%	20.6%

In that the projected road systems for each Forest vary by 436 miles or less, only relatively slight differences occur between alternatives. This is especially true for the Sawtooth National Forest whose classified road system is expected to vary little under any of the alternatives. In general, maintenance responsibilities are proportional to the size of the classified road system. This analysis assumes a static road maintenance funding level. Since Alternative 5 is likely to result in the largest road system on the Payette and Sawtooth, it should result in the lowest percentage of roads maintained to standard. This is also the case under Alternative 6 on the Boise. Conversely, Alternative 3 is likely to result in the smallest road system on the Boise and Sawtooth while Alternative 6 results in the smallest road system on the Payette. These alternatives on the respective Forests are likely to result in the highest percentages of roads maintained to standard.

The above results will be improved, to some extent, by commercial user contributions, which are not estimated in this analysis. Commercial user contributions would contribute to meeting road maintenance standards and would be likely to be proportional to the levels of mechanical treatments under each alternative. In this regard, road maintenance capabilities under Alternatives 5 and 3 would probably benefit to the greatest extent. However, such performance improvements are not expected to be substantial.

Cumulative Effects

As populations grow and urban development expands near the Ecogroup Forests, the use of Forest roads will increase. The Forest arterials and major collectors that connect the Forests to these areas will experience the most increased day-use traffic, particularly on weekends. This traffic adds to the maintenance work necessary to keep the roads in a safe and structurally sound condition.

As travel to and through the Forests increases, there will be an increase in impacts to surrounding public roads. County roads will be affected the most, as they generally are not constructed to withstand high traffic volumes. Congestion during peak summer travel months may increase on State Highways 55, 21, and 75, as well as U.S. Routes 93, 20, and 95 and U.S. Interstate 84. Timber sale litigation has reduced commercial forest products traffic to well below what was expected under the original Forest Plans, especially on the Boise and Payette. The level of commercial forest products traffic is expected to increase under most alternatives above current levels however, these levels would still be likely to be somewhat lower than original Forest Plan levels.

The Forest Service is required by law to provide reasonable access to private inholdings. As ownership of these lands has changed in recent years, more interest in developing them for second homes or developed recreation areas has been seen. Pressure on the Forests to provide more than the historical, primitive, or low-standard road access increases. It usually is in the interest of the Forest Service to request that a public transportation authority, such as the local county government, accept responsibility for management and maintenance of roads that provide access to multiple private inholdings.